

IN-LINE PARTICULATE DETECTOR

ABSTRACT OF THE DISCLOSURE

An in-line particulate detector comprises a housing having an inner flow portion. The housing is disposed between adjacent portions of pipeline to permit a fuel flow from a fuel source through the inner flow portion to a fuel consumer. A light source is positioned within the housing for emitting a light beam within the inner flow portion. A first photodetector is positioned within the housing to detect the full strength of the light beam. A second photodetector is positioned within the housing to detect low, baseline levels of the light beam. Circuitry is coupled to first and second photodetectors to monitor the ratio of light intensities. When a fuel containing particulates is introduced, the light beam is scattered and the intensity measured by the second photodetector will increase and the intensity measured by the first photodetector will decrease.